AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1. (Currently Amended): A flux assisted solid phase epitaxial growth method, characterized in that it comprises the steps of:

depositing an amorphous thin film made of an objective substance and a flux of a substance producing a eutectic with said objective substance but not producing any compound with said objective substance, on a substrate at a first temperature ~~less than a eutectic point of said objective and flux substances~~, and

heat-treating said substrate at a second temperature ~~not less than the eutectic point of said objective and flux substances and less than whichever lower one of melting points of said objective and flux substances~~ so as to form a eutectic made of said objective and flux substances; wherein

said first temperature is less than a eutectic point of said objective and flux substances, and

said second temperature is not less than the eutectic point of said objective and flux substances and less than the lower melting point of said objective and flux substances.

2. (Original): A flux assisted solid phase epitaxial growth method as set forth in claim 1, characterized in that said flux is of an amount which is selected according to an amount of said

objective substance to be grown so that the objective and flux substances have a composition ratio at said eutectic point.

3. (Currently Amended): A flux assisted solid phase epitaxial growth method, characterized in that it comprises the steps of:

depositing a thin film made of an objective substance and a thin film made of a flux of a substance producing a eutectic with said objective substance but not producing any compound with said objective substance, on a substrate at a first temperature ~~less than a eutectic point of said objective and flux substances~~, and

heat-treating said substrate at a second temperature ~~not less than the eutectic point of said objective and flux substances and less than whichever lower one of melting points of said objective and flux substances~~ so as to form a eutectic made of said objective and flux substances; wherein

said first temperature is less than a eutectic point of said objective and flux substances, and

said second temperature is not less than the eutectic point of said objective and flux substances and less than the lower melting point of said objective and flux substances.

4. (Original): A flux assisted solid phase epitaxial growth method as set forth in claim 3, characterized in that said flux is of an amount which is selected according to an amount of said

objective substance to be grown so that the objective and flux substances have a composition ratio at said eutectic point.

5. (Currently Amended): A flux assisted solid phase epitaxial growth method ~~as set forth in any one of claims 1 to 4~~, characterized in that it comprises the steps of:

depositing an amorphous thin film made of an objective substance and a flux of a substance producing a eutectic with said objective substance but not producing any compound with said objective substance, on a substrate at a temperature less than a eutectic point of said objective and flux substances, and

heat-treating said substrate at a temperature not less than the eutectic point of said objective and flux substances and less than the lower melting point of said objective and flux substances,

wherein said objective substance is a multi-component oxide which contains Bi as a constituent element, and said flux is of the substance producing the eutectic with said multi-component oxide containing Bi as a constituent element and not producing any compound therewith.

6. (Original): A flux assisted solid phase epitaxial growth method as set forth in claim 5, characterized in that said multi-component oxide which contains Bi as a constituent element is one selected from the group which consists of $Bi_4Ti_3O_{12}$, $Bi_4BaTi_4O_{15}$, $SrBi_2Ta_2O_3$ and $Bi_2Sr_2CaCu_2O_8$, and said flux is a ternary composition of Bi_2O_3 – CuO – TiO family.

7. (Original): A flux assisted solid phase epitaxial growth method as set forth in claim 6, characterized in that said multi-component oxide which contains Bi as a constituent element is $Bi_4Ti_3O_{12}$, and said ternary composition of Bi_2O_3 – CuO – TiO family is Bi_2O_3.

8. (Currently Amended): A flux assisted solid phase epitaxial growth method as set forth in ~~any one of claims 1 to 4~~ claim 5, characterized in that said substrate is a single-crystal substrate or a substrate covered with a single-crystal thin film.

9. (Original):A flux assisted solid phase epitaxial growth method as set forth in claim 8, characterized in that said single-crystal substrate or said single-crystal thin film is of one composition selected from the group which consists of $SrTiO_3$, Al_2O_3, Si, $LaAlO_3$, MgO and $NdGaO_3$.

10. (New): A flux assisted solid phase epitaxial growth method as set forth in claim 5, characterized in that said flux is of an amount which is selected according to an amount of said objective substance to be grown so that the objective and flux substances have a composition ratio at said eutectic point.

11. (New): A flux assisted solid phase epitaxial growth method ~~as set forth in any one of claims 1 to 4~~, characterized in that it comprises the steps of:

depositing a thin film made of an objective substance and a thin film made of a flux of a substance producing a eutectic with said objective substance but not producing any compound with said objective substance, on a substrate at a temperature less than a eutectic point of said objective and flux substances, and

heat-treating said substrate at a temperature not less than the eutectic point of said objective and flux substances and less than the lower melting point of said objective and flux substances,

wherein said objective substance is a multi-component oxide which contains Bi as a constituent element, and said flux is of the substance producing the eutectic with said multi-component oxide containing Bi as a constituent element and not producing any compound therewith.

12. (New): A flux assisted solid phase epitaxial growth method as set forth in claim 10, characterized in that said flux is of an amount which is selected according to an amount of said objective substance to be grown so that the objective and flux substances have a composition ratio at said eutectic point.

13. (New): A flux assisted solid phase epitaxial growth method as set forth in claim 10, characterized in that said substrate is a single-crystal substrate or a substrate covered with a single-crystal thin film.

14. (New): A flux assisted solid phase epitaxial growth method as set forth in claim 11, characterized in that said substrate is a single-crystal substrate or a substrate covered with a single-crystal thin film.

15. (New): A flux assisted solid phase epitaxial growth method as set forth in claim 12, characterized in that said substrate is a single-crystal substrate or a substrate covered with a single-crystal thin film.